

## CLAIMS:

✓1. A method of transmitting signals called return signals from a signals distribution network comprising an antenna system that is capable of transmitting return signals to a satellite in a first frequency band based on signals received from the network in a second frequency band which lies in the upper part of the television frequency band used in the network, in which method signals comprising, inter alia, data for the frequency management of the return signals are received in a channel called downstream channel intended to serve a plurality of user receivers, characterized in that:

- the return signals are transmitted through the network from a user receiver with a frequency lying below the television frequency band used in the network,
- these return signals are subjected to a frequency translation on the output of the network to the antenna system, so that they are delivered to the antenna system with a frequency lying in the second frequency band, and
- the frequency management data received in the downstream channel are used during said frequency translation to select the frequency to be produced in the second frequency band.

2. A method as claimed in claim 1, characterized in that the return signals are transmitted through the network in the 20-60 MHz frequency band.

3. A method as claimed in claim 1, characterized in that the management data of the return frequencies, which are received in the downstream channel, are processed in the user receiver after which orders resulting therefrom are supplied to the network.

4. A method as claimed in claim 3, characterized in that the signals representing said orders are coded in the form known as I<sup>2</sup>C.

5. A method as claimed in claim 4, characterized in that I<sup>2</sup>C clock signals are modulated on a first frequency to be transmitted from the user receiver to the antenna system, I<sup>2</sup>C data signals are modulated on a second frequency to be transmitted from the user receiver

to the antenna system, and I<sup>2</sup>C data signals are modulated on a third frequency to be transmitted from the antenna system to the user receiver.

6. A signals distribution network comprising an antenna system that is capable of transmitting signals called return signals to a satellite in a first frequency band based on signals received from the network in a second frequency band which lies in the upper part of the television frequency band used in the network, and comprising a channel called downstream channel intended to supply signals to a plurality of user receivers and conveying, inter alia, data for the frequency management of the return signals, characterized in that it comprises:

- a unit called complementary unit which plays the role of interface between the usual elements of the network and a user receiver and is formed by first means for receiving from the network and delivering to the user receiver the downstream channel signals and the frequency management data, and for transmitting, from a user receiver to the network, return signals whose frequency lies below the television frequency band used in the network and frequency management data,
- a frequency translation unit which plays the role of interface between the usual elements of the network and the antenna system and is formed by second means for receiving return signals whose frequency lies below the television frequency band used in the network, for subjecting these return signals to a frequency translation that brings them to the second frequency band, and for delivering these return signals, after translation, to the antenna system to be transmitted by this system;
- third means for transmitting to the frequency translation unit frequency management data which are received via the network, intended to permit the second means to select the frequency to be used in the second frequency band.

7. A signals distribution network as claimed in claim 6, characterized in that the first means transmit the return signals in the 20-60 MHz frequency band.

8. A signals distribution network as claimed in claim 6, characterized in that the frequency translation unit comprises means for using frequency management data which are sent thereto via the network.

9. A signals distribution network as claimed in claim 8, characterized in that the complementary unit comprises means for receiving, modulating and transmitting to the network signals that represent said management data, which are brought thereto in the form of I<sup>2</sup>C data, and the frequency translation unit comprises means for receiving and demodulating the said I<sup>2</sup>C data.

10. A signals distribution network as claimed in claim 9, characterized in that the complementary unit comprises means for modulating I<sup>2</sup>C clock signals on a first frequency and transmitting them to the network, the frequency translation unit comprises means for receiving I<sup>2</sup>C clock signals from the network and demodulating them, the complementary unit comprises means for modulating I<sup>2</sup>C data signals on a second frequency and transmitting them to the network, the frequency translation unit comprises means for receiving I<sup>2</sup>C data signals from the network and demodulating them at this second frequency, the frequency translation unit comprises means for modulating I<sup>2</sup>C data signals on a third frequency and transmitting them to the network, and the complementary unit comprises means for receiving I<sup>2</sup>C data signals from the network and demodulating them at the third frequency.

11. A signals distribution network as claimed in claim 6, characterized in that the complementary unit and the frequency translation unit also provide the remote power supply of the transmitter.

12. A unit intended to serve as an interface between a signals distribution network and a user receiver, comprising means for receiving downstream channel signals and frequency management data from the network and delivering them to the user receiver, and for transmitting return signals from the user receiver to the network of which return signals the frequency lies below the television frequency band used in the network and frequency management data.

13. A frequency translation unit intended to serve as an interface between a network and an antenna system, including means for receiving return signals whose frequency lies below the television frequency band used in the network, for subjecting these return signals to a frequency translation that brings them to a second frequency band situated high up in the television frequency band used in the network, and for delivering these return signals, after translation, to the antenna system to be transmitted by this system.